

among the different parts of its body. Each part has work of keeping the living thing alive is divided trees, turtles, and hamsters, to name just a few—the In multicellular living things—humans, birds, multicellular.

those that are composed of many cells are called composed of only one cell are called unicellular; is made up of many cells. Living things that are ameba is made up of one cell. Your body, however, are made of cells. Actually, the whole “body” of the ameba have in common? The answer: Both of you Here’s a riddle for you: What do you and an

1-2 Levels of Organization

Guide for Reading
Focus on this question as you read.
◀ What are the levels of organization in the human body?

1. What is homeostasis?
2. What is the body’s source of energy?
3. Explain why it is important for all living things to maintain homeostasis.

Critical Thinking—Applying Concepts

1-1 Section Review

remains remarkably stable, or unchanged. The process by which the body’s internal environment is kept stable in spite of changes in the external environment is called **homeostasis** (hoh-mee-oh-STAY-sis). Put another way, **homeostasis** is the process by which the delicate balance between the activities occurring inside your body (amount of sugar in the blood) and those occurring outside your body (amount of sweets you eat) is maintained. In order to perform all the life activities, humans, like all living things, need energy. Even homeostasis needs energy. After all, the body works hard to keep its internal environment stable. Where does the body get the energy to do all of this work? Just as an engine uses gasoline as its energy source, living things use food as the source of energy for all their activities.

ACTIVITY

DISCOVERING

Human Horsepower

1. With a metric tape measure, measure the height of a flight of stairs. Record this number.
2. Have your partner time how long it takes you to climb the flight of stairs. Record this number.
3. To find your horsepower, divide the height of the flight of stairs by the amount of time it took you to climb them. How much horsepower can you generate with your muscles? Is horsepower the same for people of different ages and weights? Explain your answer.